

```
In [1]: import seaborn as sns
import matplotlib.pyplot as plt
import pandas as pd
```

Load the Titanic dataset

```
In [2]: titanic = sns.load_dataset('titanic')
```

Display the first few rows of the dataset

```
In [3]: print("-----Dataset first 5 rows-----")
print(titanic.head())
print("\n")
```

```
-----Dataset first 5 rows-----
   survived  pclass    sex  age  sibsp  parch    fare embarked  class
\
0         0      3  male  22.0     1     0   7.2500         S  Third
1         1      1 female  38.0     1     0  71.2833         C  First
2         1      3 female  26.0     0     0   7.9250         S  Third
3         1      1 female  35.0     1     0  53.1000         S  First
4         0      3  male  35.0     0     0   8.0500         S  Third

   who  adult_male  deck  embark_town  alive  alone
0  man         True  NaN  Southampton    no  False
1 woman        False   C   Cherbourg   yes  False
2 woman        False  NaN  Southampton   yes   True
3 woman        False   C   Southampton   yes  False
4  man         True  NaN  Southampton    no   True
```

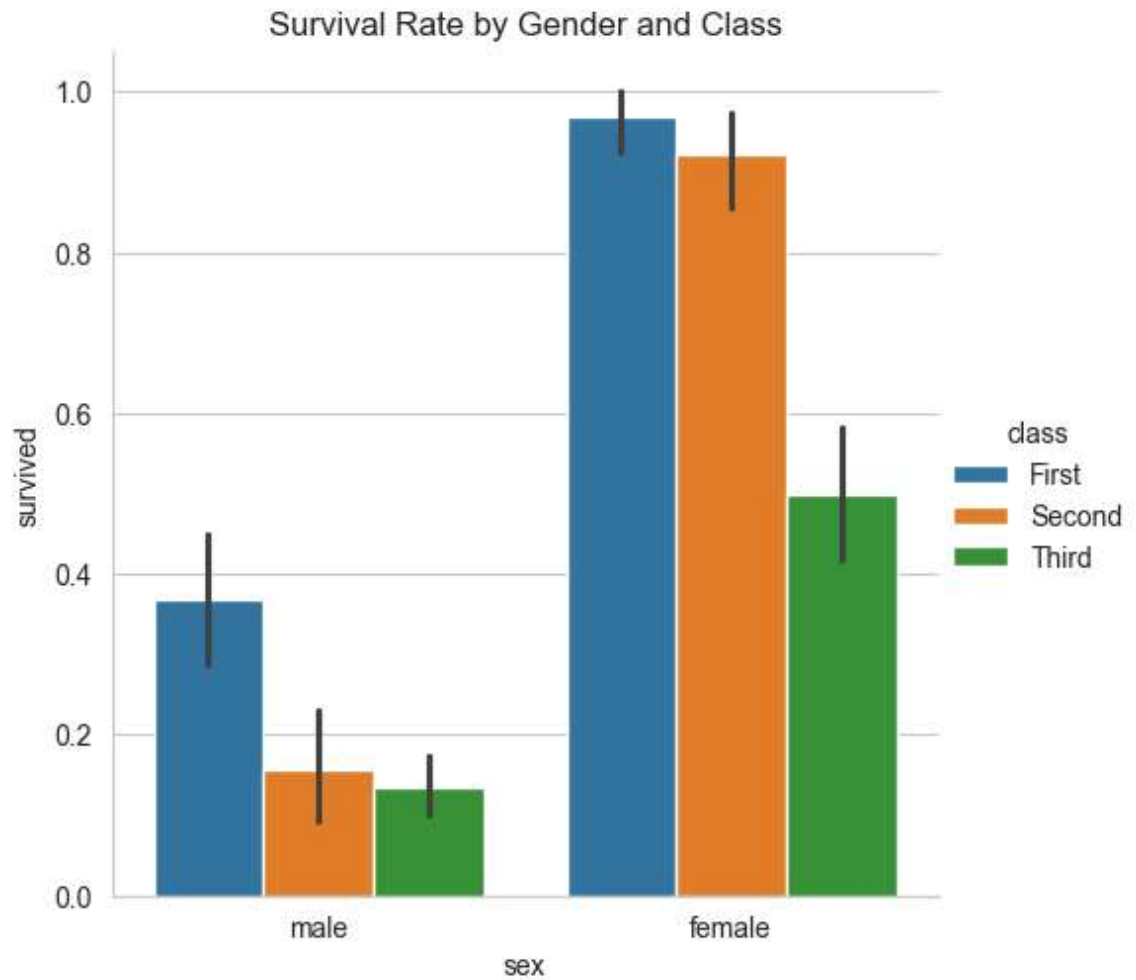
Use Seaborn to visualize patterns in the data

```
In [4]: print("Setting style to whitegrid")
sns.set_style("whitegrid")
```

Setting style to whitegrid

```
In [5]: print("-----Creating bar plot of survival rate by gender and class")
sns.catplot(x="sex", y="survived", hue="class", kind="bar", data=titanic)
plt.title('Survival Rate by Gender and Class')
plt.show()
print("\n")
```

-----Creating bar plot of survival rate by gender and class-----  
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```
In [6]: print("-----Plotting histogram of ticket prices-----")
plt.figure(figsize=(10, 6))
sns.histplot(data=titanic, x='fare', bins=30, kde=True)
plt.title('Distribution of Ticket Prices')
plt.xlabel('Fare')
plt.ylabel('Frequency')
plt.show()
```

-----Plotting histogram of ticket prices-----

